

or encapsulating the antibodies in liposomes, a fact the Examiner recognized. (Official Action page 3, last paragraph)

Leclerq et al. discloses an anti-lipase antibody. Lipase is an exocrine secretion without activity on food intake or gastro-intestinal motility; it is needed for lipid digestion. Leclerq et al. does not use the enzyme to inhibit fat absorption or digestion in the gut. It is used to inhibit fat metabolism (uptake) into the cells, with the purpose of changing body composition. In other words, the injected antibody of Leclerq et al. has nothing to do with adsorption of fat the animal has eaten.

In contrast the present invention has no effect on lipid uptake by the cells in the body of the animal. Rather, by feeding it liposome-encapsulated anti-lipase antibodies, the amount of fat digested and absorbed from the food is reduced, without affecting the body lipid composition. Leclerq et al. is changing the body lipid composition and has no effect on fat digestion. Even though both processes use anti-lipase antibodies they produce different end results.

It appears that the Examiner is not distinguishing metabolism from digestion. Digestion being the processes in which food is converted into absorbable form in the gastro-intestinal tract, metabolism involving processes in the cells of the body, including anabolism (synthesis) and catabolism (degradation).

Cook et al. discloses a method for improving the efficiency of feed conversion to desirable body tissue, i.e., lean. However, the present invention does not affect the animal's function of converting feed into desirable body weight or improve feed efficiency. It has no effect on endogenous regulators of food intake and gastro-intestinal motility. There is no reason to combine Cook et al. and Leclerq et al. for any purpose expressed in those references.

Furthermore, Cook's patent did not use liposomes for feeding the antibodies even

when a lipid was used. The reference suggests using unencapsulated antibodies, optionally encapsulated in a lipid layer, but not liposomes. The method described in the text is to simply mix the spray-dried, egg-containing antibodies with oil. This procedure does not give liposomes; instead it produces an unstable emulsion that is then sprayed onto the feed. When the mixture is sprayed, the feed becomes the inner core and the mixture of oil and spray-dried whole egg becomes the outer core. Once dried, the fat makes up the outer layer. Cook et al. did not suggest using true liposomes, which require different procedures than merely mixing spray-dried whole egg and oil.

Applicants submit that the case is now in condition for allowance. Early notification of such action is earnestly solicited.

Respectfully submitted,

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